

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

WHAT IS CLAIMED IS:

20. (withdrawn) A portable, computerized aircraft flight system which accesses, organizes, manages, and manipulates flight data and functions, resulting in output displayed and accessible by a user, comprising:

a portable device having,

hardware with a processor; memory; data input means, for permitting said user to input data; display means for displaying data to said user; data recording and storage means; and data output means for permitting said user to output data;

a self-powering element for electrically operating said device independent of a fixed power supply;

software, including an operating system and operating program;

a data source which provides flight data in an electronic format, said data source supplying said data in an input format compatible with said portable device input means;

data delivery for delivering said data to said portable device; and,

application software which manipulates and renders said source data, delivering the data in a format consistent with the functionality of the device.

21. (withdrawn) The flight system of claim 20 wherein said software includes means of accessing said flight data and functions by means of an application program interface.

22. (withdrawn) The flight system of claim 20 wherein said software comprises means of organizing said data by means of a search engine function.

23. (withdrawn) The flight system of claim 20 further comprising a communications means whereby said portable device communicates with data sources remote from said device.

24. (withdrawn) The flight system of claim 20 further comprising a data communications means wherein the preferred embodiment is wireless.

25. (withdrawn) The flight system of claim 20 further comprising a data communications means wherein the preferred embodiment is wireless.

26. (withdrawn) The flight system of claim 20 wherein said data delivery means for delivering said data to said portable device is by means of the Internet.

27. (withdrawn) The flight system of claim 20 wherein the method of rendering said flight data and functions is by means of an HTML browser format.

28. (withdrawn) The flight system of claim 20 wherein said device includes a flight planning component comprising;

a flight planning applications software program;

inputted flight data; and,

a continuous data update capability.

29. (withdrawn) The flight system of claim 20 wherein said portable device further comprises an external power source connection capability.

30. (withdrawn) The flight system of claim 20 wherein said portable device further comprises data communications means for establishing data communication links between said portable device and disparate data sources.

31. (withdrawn) The flight system of claim 20 wherein said portable device further comprises a means of ascertaining position.

32. (withdrawn) The flight system of claim 20 wherein said portable device further comprises a means of terrain mapping.

33. (withdrawn) The flight system of claim 20 wherein said portable device further comprises means permitting the user to access and manipulate said data and programs by means of peripheral devices comprising;

peripheral ports;

peripheral hardware; and,

peripheral device drivers.

34. (withdrawn) The flight system of claim 20 wherein said portable device further comprises a means of attaching the device to an aircraft, comprising;

a means of securing said device to the aircraft;

a means of allowing the user to view said device's display while said device is attached to the aircraft; and

a means of removing said device from said attachment device.

35. (withdrawn) The flight system of claim 20 wherein said portable device further comprises a means of attaching said computer and associated power supply to an aircraft, comprising;

a means of securing said device and said power supply to the aircraft;

a means of allowing the user to view said device's display while said device and said power supply are attached to the aircraft; and,

a means of removing said device and power supply from said attachment device.

36. (withdrawn) The flight system of claim 20 wherein the portable device further comprises a timing mechanism.

37. (withdrawn) The flight system of claim 20 wherein said programs specifically include application program interfaces and search engine routines as the means of relating and aggregating data.

38. (withdrawn) The flight system of claim 20 which includes construction characteristics resembling a tablet or other forms consistent with the intended use.

39. (withdrawn) The flight system of claim 20 wherein said portable device is attached to vehicles other than aircraft.

40. (withdrawn) A portable, computerized aircraft flight system which accesses, organizes, manages, and manipulates disparate data and functions, resulting in output accessible by a user, comprising:

a portable device having,

hardware with a processor; memory; data input means, for permitting a user to input disparate data; display means for displaying data to a user; data recording and storage means; data output means for pertaining a user to output data;

a power source comprising one or more batteries and an external power connection capability;

software, including an operating system, and program,

application software, and,

a means of docketing the device to the aircraft whereby said portable device becomes an operatively interconnected component of the aircraft.

41. (withdrawn) The flight system of claim 40 wherein said portable device includes a means of docking the device to the aircraft whereby said portable device becomes an operatively interconnected component of the aircraft, comprising;

a hardware docking assembly on the portable device;

a hardware docking assembly on the aircraft, whereby, when connected the device and aircraft may exchange data and respond to user respond to user input as an integrated unit; and,

an interconnect whereby the device can optionally share the aircraft's power source.

42. (withdrawn) The flight system of claim 20 wherein said portable device includes a means of docking the device to the aircraft whereby said portable device becomes an operatively interconnected component of the aircraft, comprising;

a hardware docking assembly on the portable device;

a hardware docking assembly on the aircraft;

a computer on the aircraft which sends and receives data, transmitting between it and said portable devices when docked, comprising;

a communication means between said portable device and said aircraft computer;

and,

associated software.

43. (withdrawn) The flight system of claim 40 wherein said portable device includes a means of docking the device to the aircraft whereby said portable device becomes an operatively connected component of the aircraft, comprising;

a hardware docking assembly on the portable device;

a hardware docking assembly on the aircraft;

a computer on the aircraft which sends and receives data transmitted between it and said portable device, comprising;

a communication means between said portable device and said aircraft computer;

associated communications software; and,

a means of controlling moveable aircraft components, comprising;

software which sends commands to designated moveable components;
and,

the aircraft's electronically responsive flights control and operating
systems.

44. (withdrawn) The flight system of claim 40 wherein said portable device receives performance and system data from the aircraft to which it is docked.

45. (withdrawn) The flight system of claim 40 wherein said portable device receives performance and system data from the aircraft to which it is docked, manipulates said data, and outputs revised data back to the aircraft thereby effecting changes in the aircraft's systems or controls by means of transferring said data electronically.

46. (withdrawn) The flight system of claim 40 wherein said portable device receives data from onboard aircraft computers by means of said docking system, manipulates said data, and similarly returns data to the aircraft for display on other aircraft computer systems or display devices.

47. (withdrawn) The flight system of claim 40 wherein the portable device is docked for use with transportation vehicles other than aircraft.

Claims 48-59 (canceled)

60. (withdrawn) The flight system of claim 20 wherein an electronic flight system is used to manipulate an aircraft by an on-board or remote user, comprising the following steps:

(a) electronically connecting the electronic flight system device to the autopilot system;

(b) inputting aircraft commands into the device;

(c) instructing the device to use translation/API strategies and programs to reformat, adjust, stack and interface the commands into the executable language of the aircraft navigation and operating systems;

(d) outputting commands into the aircraft's navigation and operating system through the device's autopilot interface;

(e) instructing the aircraft computers and operating systems to respond to the input commands as they would to other normal, electronic autopilot command inputs;

(f) outputting the results of the aircraft navigation, flight and operational systems back to said electronic device,

(g) said outputs which may then be accessed and reviewed by the user for additional inputs,

(h) thereby permitting an on-board or remote controller to manipulate a vehicle through said electronic device.

Claims 61-67 (cancelled)

68. (currently amended) A method of providing to and for use by an aircraft aviation professional ~~or pilot~~—a lightweight and easily manipulated electronic flight bag, said method comprising the steps of:

(a) providing a transportable laptop computer to be carried by said the aviation professional to-and from-and within-for use within at least one of an aircraft and an airport, in a carry bag;

(b) programming said the transportable laptop computer with linear and non-linear algorithms and operating programs capable of: processing flight information, manipulating flight related data in a non-linear algorithm thereby aiding in flight decision-making processes resulting in solutions to flight related mathematical computations and runway selections and aircraft operating parameters and procedures, calculating pilot fatigue limits and scheduling issues and fuel computations, providing data displays to said professionals; and-the aviation professional;

(c) receiving information for a first flight plan from a flight operations, wherein the information for the first flight plan includes a departure runway information, destination information, alternate airports information, and fuel time information;

(e) loading (d) inputting aircraft and flight related data into said the transportable laptop and pertaining to a flight plan, computer using an input device, wherein the aircraft and flight related data includes weather information for said the first flight plan, aircraft crew scheduling information, aircraft maintenance information, aircraft load weight and balance information, and flight passenger concerns, aircraft manifest information;

(e) updating information that includes the weather information, the aircraft crew scheduling information, the aircraft maintenance information, the aircraft load weight and balance information and the aircraft manifest information on a continuous basis using the transportable laptop computer;

(f) calculating using the transportable laptop computer while en route an adjusted second flight plan based on the continuously updated information, wherein the adjusted second flight plan is substantially different than the first flight plan; and

(g) outputting the adjusted second flight plan while en route to the aviation professional using at least one of an interactive headgear worn by the aviation professional, a translucent display coupled to the transportable laptop computer and an aircraft control system.

69. (currently amended) The method of Claim 68 further comprising the step of loading into said—the transportable laptop computer aircraft and aviation manuals for flight operating and emergency procedures, and charts for an off-line emergency airport.

70. (canceled)

71. (currently amended) The method of Claim 68 further including—comprising the step of providing said—the transportable laptop computer [[as]], wherein the transportable laptop computer includes a knee-top ergonomic style unit.

72. (canceled)

73. (currently amended) The method of Claim 68 further including—comprising the step of programming, and loading data into, said laptop computer on-line, and off-line through a modem, and via internet and intranet systems, and via other communication means.

74. (new) The method of Claim 68, further comprising formatting the adjusted second flight plan into an electronic output, wherein the electronic output may be used directly by an aircraft auto-pilot control system coupled to the aircraft.

75. (new) The method of Claim 68, wherein the adjusted second flight plan includes an alternate destination, alternate runway, alternate crew and an alternate route.

76. (new) The method of Claim 68, wherein the information for a first flight plan and the updated information are received by the transportable laptop computer using wireless communications.

77. (new) The method of Claim 68, further comprising providing the aviation professional with at least one of charts, maps, log-books, union regulations and rules and crew rest and duty limits using the transportable laptop computer.